

CLAIMS

1. A CT scanner comprising a stator and a rotor having an axis of rotation mounted to the stator so that the rotor is rotatable about the axis of rotation comprising:
 - 5 an X-ray source mounted to the rotor, said X-ray source having a focal spot from which X-rays emanate;
 - an X-ray detector array comprising a matrix of rows and columns of X-ray detectors;
 - anti-scattering (AS) material for absorbing X-rays positioned between columns of the X-ray detectors; and
 - 10 anti-scattering (AS) material for absorbing X-rays positioned between rows of the X-ray detectors.
2. A CT scanner according to claim 1, wherein as seen from a perspective of a first coordinate system located in substantially any first detector of the detector array and a
15 homologous coordinate system located in substantially any second detector of the detector array, the AS material has substantially a same configuration to within a parity transformation and/or a rotation transformation.
3. A CT scanner according to claim 2 wherein the AS material is located between every
20 other row of detectors.
4. A CT scanner according to claim 2 or claim 3 wherein the AS material is located between every other column of detectors.
- 25 5. A CT scanner according to any of the preceding claims wherein the AS material is formed in a shape of a thin foil for which for any point on the foil a segment of a line from the focal point of the X-ray source to the point lies substantially within or on the surface of the foil.
6. A CT scanner according to claim 5 wherein foil between columns of detectors extends
30 towards the focal point to a height relative to the detector array that is different from a height to which foil located between columns of detectors extends towards the focal point.
7. A CT scanner according to claim 5 or claim 6 wherein thickness of the foil between rows is different from thickness of the foil between column.

8. A CT scanner according to any of claims 5-7 wherein the detectors have a hexagonal shape and the foil is shaped to follow the hexagonal shape of the detectors.